ABSTRACT OF THE DISCLOSURE

The invention is directed to a trap material use in a chemical trace detection portal for detecting trace amounts of contraband, and more particularly for detecting vapors and particles emitted from drugs and explosive devices. The trap material is made of a metallic foam material, such as aluminum foam metal, copper foam metal, stainless steel foam metal, or a silica-carbon foam metal, which have high thermoconductivity and reduced density, as compared to conventional trap materials, thereby ensuring that the internal temperature of the subject trap rapidly achieves the temperature required during desorbing of the trace materials.